



# **Lake Orange Management Report**

**Popular Format**

**Federal Aid Project -- F111R10**

**March 2002**

**Steve Owens, Fisheries Biologist**

**and**

**Scott Herrmann, Fisheries Technician, Sr.**

**Virginia Department of Game and Inland Fisheries**

**1320 Belman Road**

**Fredericksburg, VA 22401**

Lake Orange is a 124-acre Department-owned public fishing lake in Orange County that was impounded in 1964 and opened to fishing in 1967. The lake is located a few miles east of Orange, VA and offers a scenic setting surrounded by gently rolling farmland and hardwood forests. Access to the lake is off of the main lake peninsula on the western side where the boat ramp, concession, fishing pier, parking lot, picnic facilities and plenty of great shoreline access can be found.

Lake Orange supports a typical warmwater fish community of largemouth bass, bluegill, redear sunfish, black crappie, channel catfish and walleye. Northern pike have been stocked occasionally over the last decade and a limited fishery exists. Walleye and channel catfish are stocked on a regular basis to provide anglers with good fishing action. Lake Orange is fertilized annually, as the added nutrients increase the lake's productivity and angler catch.

Lake Orange became known for producing the world record white bass of 6 pounds 13 ounces in 1989. How white bass were introduced into Lake Orange is still a mystery, as they were never officially stocked. Illegal angler introduction or accidental hatchery stocking are two possible answers. The population number of white bass is not accurately known, but biologists believe it to be very small. Gizzard shad were first documented in Lake Orange sometime in the mid-1990's, and the population is now well established. The main target species at Lake Orange are black crappie and largemouth bass. Yellow perch, white perch, warmouth and common carp also provide some action.

The largemouth bass fishing is very good at Lake Orange. There are numerous bass in the 10 to 12 inch size range with a decent number in the 15 to 18 inch size range. The 2001 electrofishing sample by Department fisheries biologists produced 146 largemouth bass in one hour of sampling. The data revealed the CPE-P to be 22. CPE-P is the index used in analyzing sample catch rates. It stands for the "catch per effort of preferred fish." The CPE-P for LMB is the number of bass 15 inches or larger that are collected in one hour of electrofishing. Based on CPE-P, Lake Orange is ranked 8<sup>th</sup> out of 16 popular northern VA impoundments sampled by VDGIF biologists in the spring of 1998-2001.

Lake Orange had a 12-inch minimum size limit on LMB that stockpiled sub-legal fish. The population consisted of overabundant 8 to 12 inch bass with age 3 fish showing

slow growth. The 12-inch minimum size limit was removed to allow for harvest of the abundant smaller bass. 2001 electrofishing revealed the population of 9 to 12 inch bass was lower compared to past years. This will allow the remaining fish to hopefully grow at a faster rate and the bass fishery to become more balanced. The 2000 Lake Orange creel survey revealed anglers caught and released 2,717 largemouth bass (88% release rate). Anglers harvested 361 bass with the average weight being 1.4 pounds. In terms of overall success for LMB, March and September were the best months for bass fishing.

Lake Orange bass feed heavily upon the schools of gizzard shad. The abundance of shad in the lake has made fishing for bass a little more difficult. Anglers should try using crankbaits and other artificial lures that resemble a shad pattern and shape. Jigging spoons through schools of bass feeding on shad is a pattern anglers can try. A good fish finder will allow for finding schools of shad.

The Lake Orange crappie fishery is in good condition with a healthy and abundant population. Creel surveys have been conducted at Lake Orange over the years with angler species preference being recorded. Black crappie and largemouth bass have been the most sought after species. The 2000 creel survey showed black crappie to be the predominant species caught. Harvest by number was 2,141 comprising 51% of the total lake harvest. Crappie harvest comprised 34% of the harvest by weight. With a release rate of 26%, anglers caught and released 768 black crappie in 2000.

The 2001 electrofishing sample produced 58 black crappie in a 25-minute sampling run. The collected crappie size range was 5 to 11.5 inches. The average size crappie was 8 inches in length. Gill netting and trap netting of Lake Orange has produced numerous crappie in the 10 to 13 inch range. Anglers consistently catch crappie up in the 1 pound range. Anglers do well catching crappie off of the fishing pier, fish attractors, or near the many beaver lodges. Anglers are encouraged to try various crappie style jigs until they find a pattern that works best. A good technique for Lake Orange crappie is using light jig heads tipped with small minnows.

Lake Orange offers a decent walleye fishery. Lake Orange was initially stocked with walleye in 1977. The lake has been stocked annually (except 1983, 1993-1995) at a rate of 50 walleye/acre. Stocked walleye usually measure about 1.5 inches in length. Due to the difficulty and cost of raising walleye to larger size in hatcheries, biologists

have decided to stock higher numbers of small fingerlings in hopes they will survive to keep the fishery successful.

2001 electrofishing of Lake Orange only yielded 4 walleye in a 25-minute sampling run. Walleye sampled were in the 16-21 inch size range. 2000 gill netting yielded 14 walleye in 12 net nights. Five of the walleye were in the 9 to 12 inch range and the other 7 were in the 14 to 20 inch range. The evidence of different year classes is always a good sign for future fishing success. Lake Orange has the potential to produce large walleye. In the 1998 gill netting, a 27-inch walleye that weighed 8.5 pounds was caught. Anglers who actively target walleye have some success. Walleye in the 4 to 5 pound range have been caught at Lake Orange.

Lake Orange provides a good channel catfish fishery. Channel catfish have been stocked since the lake was first impounded in 1964. The lake has been stocked annually since 1986 (except 1996 and 2000) at a rate of 25/acre. The lake produces numerous catfish in the 2-pound plus range. Gill netting over the last few years has shown a good number of catfish in the 16 to 20 inch range.

Bluegills are abundant with fish averaging in the 6 – 7 inch size range, but the bluegill fishery has suffered the impact of the gizzard shad introduction and proliferation and very few trophy fish are available. Gizzard shad have fully established themselves in Lake Orange. Largemouth bass are feeding heavily upon the shad and less on the bluegill. This switch in the food chain allows for increased numbers of bluegill surviving to spawn, producing greater year classes of bluegill. The biomass of bluegill over the course of time, if not thinned out by predators or angler harvest, will lean toward slower growth and smaller size, a stunted population. Anglers are encouraged to harvest bluegill. Based on the creel survey, bluegill was the second most harvested species in 2000, comprising 12% of the number harvested (508 fish).

Lake Orange provides a limited northern pike fishery. The extent of survival and population number is not fully known. Northern pike were initially stocked into Lake Orange in 1965. The lake was stocked annually from 1965 to 1993 (except 1967 and 1975). Since the 1993 stocking, Lake Orange has only received two additional northern pike stockings in 1997 and 2001. Anglers have caught a few northern pike up to 5 pounds, over the years. The population of pike is on the low side as anglers should

consider it a bonus to fishing Lake Orange if they are able to hook and land one. Northern pike are very aggressive fish and can be caught on a variety of artificial lures normally used by bass anglers.

Lake Orange provides numerous facilities with a concession that provides boat rental, bait and tackle. Picnic facilities of a shelter, tables and grills make for an enjoyable family outing. The lake is open year round and 24 hours a day for shore fishing and for private boats. The concession is open from mid-March through mid-October, however; the other facilities are open all year. The boat ramp is located on the right side of the peninsula in the protected cove. The floating fishing pier is a popular spot for handicapped and shore-bound anglers to try their luck. The pier is located on the left-hand side of the peninsula. There is plenty of good shoreline access all along the peninsula and the trail along the cove. Plans are in the works for a new handicapped accessible pier to be built in 2002 to replace the old pier. Operation of the concession is switching over to new management and will hopefully be open for business this spring.

Several fish attractor reefs have been installed around the lake to help concentrate schools of fish to structure. New fish structure habitat consisting of sunken Christmas tree piles have been installed around the lake. Department personnel added 121 Christmas trees to Lake Orange in January 2002. Trees were sunk with attached concrete blocks and marker buoys placed on these fish structure reefs. The black crappie and sunfish should find the added habitat to their liking.

Lake Orange can be reached by taking Route 629 off of either Route 20 or Route 522, depending on where you are traveling from. Signs for Lake Orange are posted as to where to turn. Travel on Route 629 until you see Route 739. Route 739 will take you to the peninsula located in the middle section of Lake Orange.

For more information on Lake Orange, please contact:

Virginia Department of Game and Inland Fisheries  
1320 Belman Road  
Fredericksburg, VA 22401  
(540) 899-4169